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EXAMINER

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Technology Center 2100

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/503,096
Filing Date: February 11, 2000
Appellant(s): AUGUST ET AL.

Gary D. Yacura
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 24, 2006 appealing from the Office action mailed February 24, 2006 and the Final Rejection mailed June 6, 2005.

(1) Real Party in Interest

The statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,314,192	Chen	11-2001
5,822,432	Moskowitz	10-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen et al (US 6,314,192), and further in view of Moskowitz et al (US 5,822,432).

a. Referring to claim 1:

i. Chen teaches:

(1) embedding a watermark within said principal program, first transmitting said principal program with the embedded watermark to said one or more subscribers [i.e. as shown in Figure 1, embedding a digital watermark signal

into a host signal (for example, a particular copy of a software product sold to a customer) (column 1, lines 22-25). In addition, "transmit" means to enable a signal to be transferred from an information embedding system to an information extracting system over a communication channel (column 8, lines 50-54)];

(2) decoding said embedded watermark to determine the specific related data to be transmitted to said one or more subscribers, the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement; and second transmitting, in response to said decoded watermark, said specific data related to said principal program to said one or more subscribers through a communications network **[i.e., "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal is transmitted over a channel to the receiver (column1, 34-38)].**

ii. Although, Chen does not clearly and explicitly states:

(1) the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement. Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers; imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on **(column 8, lines 11-16).**

iii. Besides, Moskowitz teaches:

(1) Metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like

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".us" for United States, or ".ny" for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found **(column 9, lines 26-40)**. In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a geographical constraint on distribution, a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name **(column 13, line 34 through column 14, line 5)**.

iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) clearly mention and/or include information that is embedded in the watermark as in Chen's invention since a purpose of many of such digital watermarking systems is to embed the watermark signal so that it is difficult to detect, and so that it is difficult to remove without corrupting the host signal (column 1, lines 26-30 of Chen).

v. The ordinary skilled person would have been motivated to:

(1) clearly mention and/or include information that is embedded in the watermark as in Chen's invention for providing authentication of signals or detecting tampering (column 1, lines 30-31 of Chen).

b. Referring to claim 2:

i. Chen further teaches:

(1) wherein said decoding step further comprises decoding said watermark at a receiver located at said one or more subscribers [i.e., as shown in Figure 9, from the receiver end, replicator 930 provides values 922 to point decoder 930 for decoding each watermark-signal component embedded in each co-processed group of host-signal components (column 34, lines 55-58)].

c. Referring to claim 3:

i. Chen further teaches:

(1) receiving said principal program at a central location [i.e., as shown in Figure 1, computer system 110b, that is, for “receiving said principal program at a central location”];

(2) decoding said embedded watermark at said central location [i.e., as shown in Figure 2b, information extractor 202, that is, for “decoding said embedded watermark at said central location”]; and

d. Referring to claim 4:

i. Chen teaches:

(1) determining whether said principal program includes an embedded watermark [i.e., “host signal” means a signal into which a watermark signal is to be embedded (column 7, lines 62-63)];

(2) decoding said embedded watermark from said principal program; and transmitting, in response to said watermark, said specific related data to said one or more subscribers, over a communications network, the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement [i.e., “decoding” functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal is transmitted over a channel to the receiver (column1, 34-38)].

ii. Although, Chen does not clearly and explicitly states:

(1) the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement. Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers; imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on (column 8, lines 11-16).

iii. Besides, Moskowitz teaches:

(1) Metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like ".us" for United States, or ".ny" for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found **(column 9, lines 26-40)**. In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a geographical constraint on distribution, a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name **(column 13, line 34 through column 14, line 5)**.

iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) clearly mention and/or include information that is embedded in the watermark as in Chen's invention since a purpose of many of such digital watermarking systems is to embed the watermark signal so that it is difficult to detect, and so that it is difficult to remove without corrupting the host signal **(column 1, lines 26-30 of Chen)**.

v. The ordinary skilled person would have been motivated to:

(1) clearly mention and/or include information that is embedded in the watermark as in Chen's invention for providing authentication of signals or detecting tampering **(column 1, lines 30-31 of Chen)**.

e. Referring to claim 5:

i. This claim has limitations that is similar to those of claim 3 (2), thus it is rejected with the same rationale applied against claim 3 (2) above.

f. Referring to claim 6:

i. This claim has limitations that is similar to those of claim 3, thus it is rejected with the same rationale applied against claim 3 above.

g. Referring to claim 7:

i. Chen further teaches:

(1) wherein said watermark includes a pointer to said specific related data stored in a database, further comprising the step of retrieving said specific data from said database prior to said transmitting step [i.e., **Figure. 4B is one illustrative embodiment of watermark signal 102 that is an eight-bit message; for example, a binary serial number. There are thus 256 possible serial numbers. As is evident, such illustrative serial numbers may be the binary numbers themselves, or the binary numbers may represent numbers, text, or other representations contained in a look-up table, or other data structure, indexed by the binary numbers or related pointers (column 16, lines 22-30). Figure 2A shows the "decoding" functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal, which inherently includes "special data", is transmitted over a channel to the receiver (column1, 34-38)].**

h. Referring to claim 8:

i. This claim has limitations that is similar to those of claim 7, thus it is rejected with the same rationale applied against claim 7 above.

i. Referring to claim 9:

i. Chen further teaches:

(1) wherein said central location is a re-broadcaster of said principal program to said one or more subscribers [i.e., **in this application, each commercial is watermarked, and automated detection of the watermark is used to determine the number of times and time of day that the broadcaster, which is computer system 110a, played the commercial (column 1, lines 49-52)].**

j. Referring to claim 10:

i. Chen further teaches:

(1) wherein said re-broadcaster is the Head-end office of a cable provider [i.e., **"the Head-end office of a cable provider" is considered a computer system 110a in Figure 1**].

k. Referring to claim 11:

i. Chen further teaches:

(1) wherein said re-broadcaster is a satellite broadcast transmitter station [i.e., **"a satellite broadcast transmitter station" is considered a computer system 110a in Figure 1**].

l. Referring to claim 12:

i. Chen further teaches:

(1) wherein said re-broadcaster is an Internet service provider [i.e., **"an Internet service provider" is considered as a computer system 110a in Figure 1**].

m. Referring to claim 13:

i. Chen further teaches:

(1) appending demographic data to said secondary specific related data prior to said transmitting step, wherein said transmitting said specific related data includes transmitting said demographic data [i.e., **"host signal" means a signal into which a watermark signal is to be embedded. In one illustrative example, a host signal is a black-and-white image having 256.times.256 (=65,536) pixels, that is, "a demographic data", whereas each pixel having a grey scale value (column 7, lines 62-65). "Transmit" means to enable a signal (typically, a composite signal) to be transferred from an information embedding system to an information extracting system over a communication channel (column 8, lines 51-54)**].

n. Referring to claim 14:

i. Chen teaches:

(1) a decoder for decoding a watermark embedded in a principal program, wherein said watermark contains data from which said specific

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related data may be identified, the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement [i.e., as shown in Figure 9, a point decoder, that is, for **“decoding a watermark embedded in a principal program”**, wherein reconstructed watermark signal 106 includes **“data from which said specific related data may be identified”**]; and

(2) delivery means for delivering said specific data related to said principal program to a receiving device associated with said one or more subscribers in response to the decoded watermark [i.e., **“decoding” functions that seek to extract the watermark signal from the composite signal. Such functions may also be referred to as transmitting and receiving functions, indicating that the composite signal is transmitted, that is “for delivering said specific data related to said principal program”, over a channel to the receiver (column1, 34-38)]**.

ii. Although, Chen does not clearly and explicitly states:

(1) the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement. Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers; imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on **(column 8, lines 11-16)**.

iii. Besides, Moskowitz teaches:

(1) Metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like

“.us” for United States, or “.ny” for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found (**column 9, lines 26-40**). In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a geographical constraint on distribution, a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name (**column 13, line 34 through column 14, line 5**).

iv. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to:

(1) clearly mention and/or include information that is embedded in the watermark as in Chen's invention since a purpose of many of such digital watermarking systems is to embed the watermark signal so that it is difficult to detect, and so that it is difficult to remove without corrupting the host signal (**column 1, lines 26-30 of Chen**).

v. The ordinary skilled person would have been motivated to:

(1) clearly mention and/or include information that is embedded in the watermark as in Chen's invention for providing authentication of signals or detecting tampering (**column 1, lines 30-31 of Chen**).

o. Referring to claim 15:

i. This claim has limitations that is similar to those of claim 14, thus it is rejected with the same rationale applied against claim 14 above.

p. Referring to claim 16:

i. Chen further teaches:

(1) wherein said delivery means for delivering said specific related data is an ADSI server and said receiving device is an ADSI device [i.e., “an ADSI server” is consider a transmitter 120 (as shown in Figure 1) for transmitting “specific related data” and “an ADSI device” is considered a receiver 125 (as shown in Figure 1)].

q. Referring to claim 17:

i. Chen further teaches:

(1) wherein said delivery means for delivering said specific related data is an IP server and said receiving device is an Internet enabled application running on a web enabled device associated with said one or more subscribers [i.e., **“an IP server” is considered a transmitter 120 (as shown in Figure 1) and “an Internet enabled application running on a web enabled device” is considered a receiver 125 (as shown in Figure 1).**

r. Referring to claim 18:

i. Chen further teaches:

(1) wherein said delivery means for delivering said specific related data is a radio transmitter [i.e., **“a radio transmitter” is considered a transmitter 120 (as shown in Figure 1) for transmitting “specific related data”.**

s. Referring to claims 19, 20, 21 and 22:

i. Chen further teaches:

(1) wherein said receiving device is an FM radio receiver, a wireless telephone, a page, or a remote control device [i.e., **“an FM radio receiver, a wireless telephone, a page, or a remote control device” is considered a receiver 125 (as shown in Figure 1).**

t. Referring to claims 23 and 24:

i. Chen further teaches:

(1) wherein said delivery means for delivering said specific related data is a television broadcast transmitter or a set top box [i.e., **“a television broadcast transmitter or a set top box” is considered a transmitter 120 (as shown in Figure 1) for transmitting “specific related data”.**

u. Referring to claim 25:

i. Chen further teaches:

(1) a transmitter for transmitting said principal program with said watermark embedded therein from a point of origin to a destination [i.e., **as shown in Figure 1, transmitter 120 transmit a host signal into which a watermark**

signal is to be embedded (column 7, lines 62-63) from computer system 110A, that is “a point of origin” through a communication channel 115 to a computer system 110B, that is “a destination”].

v. Referring to claim 26:

i. Chen further teaches:

(1) delivery means for delivering said principal program to said one or more subscribers [i.e. as shown in Figure 1, transmitter 120 transmits an embedding a digital watermark signal into a host signal (for example, a particular copy of a software product sold to a customer) (column 1, lines 22-25)].

(10) Response to Argument

I. Applicant's arguments filed March 24, 2006, with respect to Claim Rejections - 35 USC § 103(a) have been fully considered but they are not persuasive.

II. Regarding to the Appellant's arguments to claims 1, 4, 14, and 15 that Chen does not disclose or suggest an operation such as recited in the claims in response to the decoding of the watermark. Namely, Chen does not disclose or suggest “transmitting, in response to said decoded watermark, said specific data related to said principal program to said one or more subscribers through a communications network” as recited in independent claims 1 and 4, or a “delivery means for delivering said specific data related to said principal program to a receiving device associated with said one or more subscribers in response to the decoded watermark” as recited in independent claims 14 and 15. Examiner disagrees with the appellant for the above argument, since Chen's system teaches "decoding" functions that seek to extract the watermark signal from the composite signal. This such “decoding” functions may also be referred to as **transmitting and receiving functions**, indicating that the composite signal is transmitted over a channel to the receiver (column 1, 34-38 of Chen). Although, Chen does not clearly and explicitly states that the specific related data including at least one of an offer to said one or more subscribers, telephone number, World Wide Web address, coupon, and advertisement. Chen, however, includes other types of values of host-signal components include color; measures of intensity other than the illustrative greyscale; texture; amplitude; phase; frequency, real numbers; integers;

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imaginary numbers; text-character code; parameters in a linear or non-linear representation of the host signal, and so on **(column 8, lines 11-16 of Chen)**. On the other hand, Moskowitz teaches that metering watermarks could contain account information or other payment information which would facilitate the transaction. Watermarks can also be made to contain information pertaining to geographical or electronic distribution restrictions, or which contain information on where to locate other copies of this content, or similar content. For instance, a watermark might stipulate that a recording is for sale only in the United States, or that is to be sold only to persons connecting to an online distribution site from a certain set of internet domain names, like ".us" for United States, or ".ny" for New York. Further a watermark might contain one or more URLs describing online sites where similar content that the buyer of a piece of content might be interested in can be found **(column 9, lines 26-40 of Moskowitz)**. In addition, claim 32 of Moskowitz teaches identifying a digital sample stream in which the digital watermarks are to be encoded wherein the digital watermarks contain at least one of a geographical constraint on distribution, a logical constraint on distribution, a Universal Resource Locator, a telephone number, an Internet Protocol address, an Internet domain name, an E-mail address, and a file name **(column 13, line 34 through column 14, line 5 of Moskowitz)**. Besides, Moskowitz's watermark does include account information or other payment information which would facilitate the transaction. Moskowitz does have the ability to send embedded data to their customer over the network. Thus, the combination of teachings between Chen and Moskowitz teach the claimed "transmitting, in response to said decoded watermark, said specific data related to said principal program to said one or more subscribers through a communications network".

Furthermore, appellant's claims do not require a separate location for the decoding and second transmitting steps. As long as the specific related data is decoded and relayed to the one or more subscribers, the claimed limitations are met.

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

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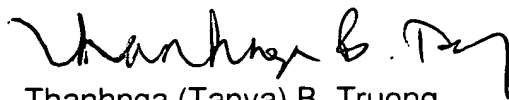
references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the combination of teachings between Chen and Moskowitz is sufficient.

For the above reasons, it is believed that the rejections should be sustained.

(11) Related Proceeding(s) Appendix


No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.


Respectfully submitted,



Thanhnga (Tanya) B. Truong
June 1st, 2006

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